

AMENDMENT NO. 5 SEPTEMBER 2015
TO
IS 3028 : 1998 AUTOMOTIVE VEHICLES —
NOISE EMITTED BY MOVING VEHICLES —
METHOD OF MEASUREMENT

(Second Revision)

(Page 5, clause **9.4.1.1**) — Substitute the following for the existing clause:

‘9.4.1.1 Manually-operated, non-automatic gear box

a) The category L7, M1 and N1 vehicles equipped with a manually operated gear box having four or less forward gear ratios shall be tested in second gear. Vehicles in these categories equipped with a manually operated gear box having more than four forward gear ratios shall be tested in second and third gears, successively. Only overall gear ratios intended for normal road usage shall be considered. The arithmetic mean of the sound levels recorded for each of these two conditions shall be calculated.

NOTE — The category of vehicles such as M1 and N1 are defined in IS 14272 and category L7 as defined in AIS-053.

b) Vehicle categories other than L7, M1 and N1 in which the total number of forward gear ratio is x (including the ratios obtained by means of an auxiliary gear box or a multi-ratio drive axle) shall be tested using, in turn, ratios equal to or higher than x/n , where:

- i) $n = 2$, for vehicles having an engine power not greater than 225 kW;
and
- ii) $n = 3$, for vehicles having an engine power greater than 225 kW.

If x/n does not correspond to a whole number, the next higher gear ratio ('higher gear ratio' means the next lower numerical ratio giving higher approach speed) shall be used. Shifting the gears from x/n must be terminated in the gear X where the engine speed (S), at which the engine develops its rated maximum power, is for the last time reached when passing the line BB'.

Example — There are 16 forward ratios for drive train having a transmission for 8 gears and an auxiliary transmission with two gears. If the engine has 230 kW then

Amendment No. 5 to IS IS 3028 : 1998

$(x/n) = (8 \times 2)/3 = 16/3 = 5 \frac{1}{3}$. The initial test gear ratio is 6_{th} (includes the gears from both the main transmission and auxiliary which is 6_{th} out of the 16 total gear ratios), with the next gear ratio is 7_{th} up to range X.'

(Page 6, clause **10.2.1**) — Substitute the following text for the existing clause:

‘10.2.1 For three wheeler and four wheeler vehicles of category M2, with GVW not exceeding 3.5 tonnes, and in categories L7, M1 and N1, the values obtained as per **10.1**, shall be reduced by 1 dB(A) if they are equipped with a direct injection diesel engine.’